

CLAIMS:

1. An autostereoscopic display comprising: a pixellated transmissive spatial light modulator comprising at least one first region, at least one second region, and a plurality of pixels; a backlight; an arrangement for substantially preventing transmission of light through said at least one first region of said modulator to an autostereoscopic viewing region of said display; and a controller for setting at least some of said pixels of said at least one first region to a first predetermined transmissivity and for setting at least some of said pixels of said at least one second region of said modulator to a second predetermined transmissivity less than said first transmissivity.
2. A display as claimed in claim 1, in which said arrangement comprises a screen for substantially preventing transmission of light from said backlight through said at least one first region.
3. A display as claimed in claim 1, in which said backlight comprises a first portion disposed behind said at least one first region and a second portion disposed behind said at least one second region, said arrangement being arranged to switch off said first portion independently of said second portion.
4. A display as claimed in claim 1, comprising a parallax element between said modulator and said backlight.
5. A display as claimed in claim 4, in which said parallax element comprises a parallax barrier.
6. A display as claimed in claim 2, comprising a parallax element between said modulator and said backlight, said screen comprising part of said parallax element.
7. A display as claimed in claim 1, in which said first transmissivity is substantially equal to a maximum transmissivity of said pixels.

8. A display as claimed in claim 1, in which said at least one second region comprises a plurality of second regions.
9. A display as claimed in claim 8, in which said controller is arranged to set said pixels of said different second regions to respective different second transmissivities.
10. A display as claimed in claim 9, in which said pixels of each said different second transmissivity form a pattern providing a visual representation of a crosstalk value corresponding to said different second transmissivity.
11. A display as claimed in claim 9, comprising a manually operable control for selecting any one of said different second transmissivities.
12. A display as claimed in claim 11, in which said controller is arranged to provide a crosstalk value corresponding to said selected second transmissivity.
13. A display as claimed in claim 12, in which said controller is arranged to perform a crosstalk correction of autostereoscopic image data for said modulator in accordance with said crosstalk value.
14. A display as claimed in claim 1, having a two dimensional operational mode.
15. A display as claimed in claim 12, having a two dimensional operating mode and in which said controller is arranged to switch to said two dimensional mode when said crosstalk value exceeds a predetermined threshold.
16. A display as claimed in claim 1, in which said controller is arranged to set said pixels of said at least one second region to any one of a plurality of different second transmissivities.

17. A display as claimed in claim 16, in which said pixels of each said different second transmissivity form a pattern providing a visual representation of a crosstalk value corresponding to said different second transmissivity.
18. A display as claimed in claim 16, comprising a manually operable control for selecting any one of said different second transmissivities.
19. A display as claimed in claim 18, in which said controller is arranged to provide a crosstalk value corresponding to said selected second transmissivity.
20. A display as claimed in claim 19, in which said controller is arranged to perform a crosstalk correction of autostereoscopic image data for said modulator in accordance with said crosstalk value.
21. A display as claimed in claim 19, having a two dimensional operational mode and in which said controller is arranged to switch to said two dimensional mode when said crosstalk value exceeds a predetermined threshold.
22. A display as claimed in claim 1, in which said at least some pixels of said first and second regions are of a same colour.
23. A display as claimed in claim 1, in which said modulator comprises a liquid crystal device.
24. An autostereoscopic display comprising: a pixellated transflective spatial light modulator comprising at least one first region, at least one second region, and a plurality of pixels; a backlight; and a controller for alternately selecting first and second phases of operation, wherein, during said first phase, said controller sets at least some of said pixels of said at least one first region of said modulator to a first transmissivity and sets said backlight to supply light of a first intensity through at least some of said at least some pixels of said at least one first region, and wherein, during said second phase, said controller sets at least some of said pixels of said at least one second region of said

modulator to a second transmissivity less than said first transmissivity and sets said backlight to supply light of a second intensity greater than said first intensity through at least some of said at least some pixels of said at least one second region.

25. A display as claimed in claim 24, in which said at least one first region at least partially overlaps said at least one second region.

26. A display as claimed in claim 25, in which each of said at least one first region and said at least one second region comprises substantially a whole display area of said modulator.

27. A display as claimed in claim 24, in which said controller is arranged to switch automatically between said first and second phases.

28. A display as claimed in claim 24, comprising a manually operable control for switching between said first and second phases.

29. A display as claimed in claim 24, comprising a parallax element between said modulator and said backlight.

30. A display as claimed in claim 29, in which said parallax element comprises a parallax barrier.

31. A display as claimed in claim 24, in which said first transmissivity is substantially equal to a maximum transmissivity of said pixels.

32. A display as claimed in claim 24, in which said at least one second region comprises a plurality of second regions.

33. A display as claimed in claim 32, in which said controller is arranged to set said pixels of said second regions to respective different second transmissivities.

34. A display as claimed in claim 33, in which said pixels of each said different second transmissivity form a pattern providing a visual representation of a crosstalk value corresponding to said different second transmissivity.
35. A display as claimed in claim 33, comprising a manually operable control for selecting any one of said different second transmissivities.
36. A display as claimed in claim 35, in which said controller is arranged to provide a crosstalk value corresponding to said selected second transmissivity.
37. A display as claimed in claim 36, in which said controller is arranged to perform a crosstalk correction of autostereoscopic image data for said modulator in accordance with said crosstalk value.
38. A display as claimed in claim 24, having a two dimensional operational mode.
39. A display as claimed in claim 36, having a two dimensional operating mode and in which said controller is arranged to switch to said two dimensional mode when said crosstalk value exceeds a predetermined threshold.
40. A display as claimed in claim 24, in which said controller is arranged to set said pixels of said at least one second region to any one of a plurality of different second transmissivities.
41. A display as claimed in claim 40, in which said pixels of each said different second transmissivity form a pattern providing a visual representation of a crosstalk value corresponding to said different second transmissivity.
42. A display as claimed in claim 40, comprising a manually operable control for selecting any one of said different second transmissivities.

43. A display as claimed in claim 42, in which said controller is arranged to provide a crosstalk value corresponding to said selected second transmissivity.
44. A display as claimed in claim 43, in which said controller is arranged to perform a crosstalk correction of autostereoscopic image data for said modulator in accordance with said crosstalk value.
45. A display as claimed in claim 43, having a two dimensional operational mode and in which said controller is arranged to switch to said two dimensional mode when said crosstalk value exceeds a predetermined threshold.
46. A display as claimed in claim 24, in which said at least some pixels of said first and second regions are of a same colour.
47. A display as claimed in claim 24, in which said modulator comprises a liquid crystal device.